

AMENDMENT UNDER 37 C.F.R. § 1.116
Application No.: 10/580,965

Attorney Docket No.: Q94919

AMENDMENTS TO THE DRAWINGS

Please replace FIG. 2 with the attached Replacement Sheet.

Attachment: Replacement Sheet (Fig. 2)

REMARKS

This Amendment, submitted in response to the Office Action dated May 1, 2008, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

I. Drawing Objection

In this Amendment, Applicant amends Fig. 2 in which the reference numeral 61 described in the specification is shown. No new matter is added. Entrance of the amended drawing is respectfully requested.

II. Claim Rejections under 35 U.S.C. § 112

In this Amendment, Applicant amends the claims such that the first and second correlation functions (corresponding to a Fourier transform and an inverse Fourier transform in claim 7) are removed from the claim recitations, and instead replaced by a correlation function as recited in the original claims before the previous amendments.

As the instant amendments to the claims revert the claims only to the previous form, i.e., before the claims are amended in Applicant's Amendment filed March 25, 2008 except minor changes for clarification purposes, Applicant respectfully submits that the instant amendments do not raise new issues requiring further consideration and/or search, and thus, request entrance of the amended claims. Applicant also respectfully requests withdrawal of the rejection under 35 U.S.C. § 112.

III. Prior Art Rejection under 35 U.S.C. § 103(a)

Claims 1-9 are rejected as allegedly being unpatentable over Ma et al. (U.S. Patent No.: 4,998,111; hereafter "Ma") in view of any one of Krasner (U.S. Patent No.: 5,663,734; hereafter "Krasner '734"), Krasner et al. (U.S. Patent No.: 6,185,427; hereafter "Krasner '427"), and King et al. (U.S. Patent No.: 6,313,787; hereafter "King").

With respect to claim 1, the Examiner alleges, inter alia, that while Ma fails to disclose the operation of Doppler Effect compensation, this feature is obvious in view of the disclosures of Krasner '734, Krasner '427 and King. Applicant respectfully disagrees as discussed below.

As the Examiner admits in page 5, lines 3-8,

- (i) Ma fails to disclose a source for initial Doppler Effect correction; and
- (ii) Ma only discloses that the Doppler Effect is compensated only after the initial output (correlation function) of the inverse Fast Fourier Transform (FFT^{-1}) 32 is obtained.

With respect to (i), the Examiner combines the teaching of the Krasner's and King directed to GPS signal processing using Doppler information received from a base station separated from a GPS receiver. However, it should be noted that, although these references disclose the base station (or a different type of external server) as a source of assistance data, they do not disclose that Doppler Effect compensation is performed at a GPS receiver or a mobile unit as in the claimed method. Instead, Krasner '427 clarifies in col. 16, lines 6-10 that Doppler Effect corrections information (other than satellite ephemeris data) is received at the mobile unit, which means that the Doppler Effect correction is not performed at the mobile unit. By contrast, the claimed method **performed by a mobile device** (see the preamble) includes compensating a Doppler Effect to correct frequencies of local duplicates. That is, the Doppler Effect is compensated at the mobile device using assistance data sent by an assistance server to the mobile device. Thus, this aspect of the claimed method is not taught or suggested by the Examiner's references.

Next, with respect to (ii), Applicant submits that no one of ordinary skill in the art having Krasner's and King at hand would have been suggested to incorporate the teachings of these references into Fig. 1 of Ma. This is particularly so because Ma's GPS device applies Doppler compensation not only to the correlation function output from the FFT^{-1} 32, which is based on the product (at the multiplier 30) of the reference signal (allegedly corresponding to the corrected local duplicates of the claim) and the RF signal (allegedly corresponding to the satellite data signal of the claim). By contrast, the references do not disclose applying Doppler Effect compensation to both signals or the product of the two signals. As alleged by the Examiner, if the reference signal generated at the reference code unit 26 (Fig. 1 of Ma) is supplied by a separate base station (alleged source) of Krasner's or King, Ma's GPS device should be applying

the Doppler Effect correction twice as the Doppler Effect compensated signal should be correlated with the RF signal from the memory 24 and subject to another Doppler Effect compensation at the PD/DC unit 34 in the loop process as the Examiner indicates. And, this process may not be able to achieve the originally intended purpose of the GPS device.

It is well settled that “[i]f proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification.” *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). While the modification of Ma’s GPS device using the teachings of the other references does not guarantee the intended purpose as discussed above, there would not have been any suggestion or motivation to make the alleged modification by one of ordinary skill in the art.

At least under the foregoing analysis, Applicant respectfully submits that the claimed method (claim 1) and corresponding receiver (claim 8) would not have been obvious in view of the Examiner’s references.

Claims 2, 3, 5-7 and 9 should be allowable at least due to their dependencies and additionally recited elements.

Claim 7 is amended in this Amendment at least base on Fig. 2 and corresponding descriptions in the specification, without adding new matter. The claim is now directed the substantially similar subject matter of the original claim.

With respect to claim 4, Applicant respectfully submits that Ma does not disclose in Fig. 2 and col. 3, lines 54-61 that the first identified peak of the identified satellite is the highest peak among the correlation peaks of the correlation function. As shown in Fig. 2, Ma simply discloses similar peaks without identifying the highest peak. Claim 4 should also be allowable due to its dependency.

IV. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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